What is claimed is:

1.   A syntax coverage percentage measuring system comprising:

        a BNF (Backus Normal (Naur) Form) rule check table which has BNF data respectively corresponding to
5 BNF syntax rules;

        a first file reading section which reads each of test input files and carries out lexical analysis to data of each of the read test input files to classify into tokens;

10   a first syntax analyzing section which carries out syntax analysis to each of said tokens, and marks one of said BNF data of said BNF rule check table corresponding to said token;

        a coverage percentage output section which
15 acquires a total number of said BNF data and a number of said marked BNF data from said BNF rule check table, and calculates a coverage percentage based on the total number of said BNF data and the number of said marked BNF data; and

20   an output section which outputs said coverage percentage calculated by said coverage percentage output section.

2.   The syntax coverage percentage measuring system according to claim 1, wherein said output section includes a display unit, and

said display unit displays said coverage

5   percentage.

3.   The syntax coverage percentage measuring

system according to claim 1, wherein said coverage

percentage output section retrieves said marked BNF

data,

5   said output section includes a display unit,

and

said display unit displays said marked BNF

data in addition to said coverage percentage.

4.   The syntax coverage percentage measuring

system according to claim 1, wherein said output

section includes a storage unit having a reporting

file, and

5   said output section stores said coverage

percentage in said reporting file.

5.   The syntax coverage percentage measuring

system according to claim 1, wherein said coverage

percentage output section retrieves said marked BNF

data,

5   said output section includes a storage unit

having a reporting file, and

said output section stores said marked BNF

data in addition to said coverage percentage in said

reporting file.

6.   The syntax coverage percentage measuring system according to claim 1, wherein said syntax analyzing section operates based on a syntax analysis program which is generated based on a BNF file in which said BNF syntax rules are described.

7.   The syntax coverage percentage measuring system according to claim 1, wherein said BNF rule check table is generated based on a BNF rule check table program which is generated based on a BNF file in which said BNF syntax rules are described.

8.   A syntax coverage percentage measuring system comprising:

        a syntax coverage percentage measuring unit program generating unit which generates a syntax analyzing section program and a BNF rule check table program from a BNF file in which BNF syntax rules are described; and

        a syntax coverage percentage measuring unit which reads said syntax analyzing section program and said BNF rule check table program generated by said syntax coverage percentage measuring unit program generating unit, tests data of each of test input files based on said syntax analyzing section program

using said BNF rule check table program, and generates

15   said syntax coverage percentage for each of said test

input files based on a test result.

9.   The syntax coverage percentage measuring

system according to claim 8, wherein said syntax

coverage percentage measuring unit program generating

unit has a BNF rule database, and reads said BNF file,

5   carries out syntax analysis to said BNF rules of said

BNF file to generate BNF data, stores said BNF data in

said BNF rule database, and generates said syntax

analyzing section program and said BNF rule check

table program from said BNF data in said BNF rule

10   database.

10.   The syntax coverage percentage measuring

system according to claim 8, wherein said syntax

coverage percentage measuring unit tests each of test

input files based on said syntax analyzing section

5   program using said BNF rule check table program, and

outputs a coverage situation of said BNF syntax rules

and said coverage percentage for said test input files

based on the test result.

11.   The syntax coverage percentage measuring

system according to claim 8, wherein said syntax

coverage percentage measuring unit program generating

unit comprises:

a BNF rule database;

a first file reading section which reads said BNF file and classifies data of said BNF file into tokens;

a BNF syntax analyzing section which carries out syntax analysis to each of said tokens to generate BNF data based on said BNF syntax rules, and stores said BNF data in said BNF rule database;

a syntax analyzing section generating section which generates said syntax analyzing section program from said BNF data stored in said BNF rule database;

a BNF rule check table generating section which generates said BNF rule check table program from said BNF data stored in said BNF rule database.

12.   The syntax coverage percentage measuring system according to claim 11, further comprising:

a display unit; and

a semantic test section carries out semantic analysis to said BNF data stored in said BNF rule database and controls said display unit to display an error message when a semantic discrepancy is found in said BNF data.

13.   The syntax coverage percentage measuring system according to claim 11, wherein each of said BNF

data has a BNF rule number and a check section, and

said check section is marked by said syntax

5   coverage percentage measuring unit.

14.   The syntax coverage percentage measuring

system according to claim 8, wherein said syntax

coverage percentage measuring unit comprises:

a BNF rule check table generated based on

5   said BNF rule check table program and having said BNF

data;

a second file reading section which reads

each of test input files and carries out lexical

analysis to data of each of the read test input files

10   to classify into tokens;

a syntax analyzing section which carries out

syntax analysis to each of said tokens, and marks one

of said BNF data of said BNF rule check table

corresponding to said token;

15   a coverage percentage output section which is

generated based on said syntax analyzing section

program, and acquires a total number of said BNF data

and a number of said marked BNF data from said BNF

rule check table, and calculates a coverage percentage

20   based on the total number of said BNF data and the

number of said marked BNF data; and

an output section which outputs said coverage

percentage calculated by said coverage percentage

output section.

15.   The syntax coverage percentage measuring
system according to claim 14, wherein said output
section includes a display unit, and
        said display unit displays said coverage
5   percentage.

16.   The syntax coverage percentage measuring
system according to claim 14, wherein said coverage
percentage output section retrieves said marked BNF
data,
5   said output section includes a display unit,
and
        said display unit displays said marked BNF
data in addition to said coverage percentage.

17.   The syntax coverage percentage measuring
system according to claim 14, wherein said output
section includes a storage unit having a reporting
file, and
5   said output section stores said coverage
percentage in said reporting file.

18.   The syntax coverage percentage measuring
system according to claim 14, wherein said coverage
percentage output section retrieves said marked BNF

data,

5   said output section includes a storage unit
having a reporting file, and

          said output section stores said marked BNF
data in addition to said coverage percentage in said
reporting file.

19.   The syntax coverage percentage measuring
system according to claim 14, wherein said syntax
analyzing section operates based on a syntax analysis
program which is generated based on a BNF file in
5 which said BNF syntax rules are described.

20.   The syntax coverage percentage measuring
system according to claim 14, wherein said BNF rule
check table is generated based on a BNF rule check
table program which is generated based on a BNF file
5 in which said BNF syntax rules are described.

21.   A method of measuring a syntax coverage
percentage, comprising the steps of:

          reading each of test input files to carry out
lexical analysis to data of each of the read test
5 input files to classify into tokens;

          carrying out syntax analysis to each of said
tokens, to mark one of BNF data of a BNF rule check
table corresponding to said token, said BNF rule check

table having said BNF data respectively corresponding
10   to BNF syntax rules;

acquiring a total number of said BNF data and
a number of said marked BNF data from said BNF rule
check table;

calculating a coverage percentage based on
15   the total number of said BNF data and the number of
said marked BNF data; and

outputting said coverage percentage
calculated by said coverage percentage output section.

22.   The method according to claim 21, wherein
said outputting step comprises the step of:

displaying said coverage percentage on a
display unit.

23.   The method according to claim 21, wherein
said outputting step comprises the step of:

outputting said coverage percentage to store
in said reporting file.

24.   The method according to claim 21, wherein
said step of carrying out syntax analysis is carried
out based on a syntax analysis program which is
generated based on a BNF file in which said BNF syntax
5   rules are described.

25.   The method according to claim 21, wherein said BNF rule check table is generated based on a BNF rule check table program which is generated based on a BNF file in which said BNF syntax rules are described.

26.   A method of measuring a syntax coverage percentage, comprising the steps of:

      generating a syntax analyzing section program and a BNF rule check table program from a BNF file in
5 which BNF syntax rules are described;

      reading said syntax analyzing section program and said BNF rule check table program generated by said syntax coverage percentage measuring unit program generating unit;

10   testing data of each of test input files based on said syntax analyzing section program using said BNF rule check table program; and

      generating said syntax coverage percentage for each of said test input files based on a test
15 result.

27.   The method according to claim 26, wherein said step of generating a syntax analyzing section program and a BNF rule check table program comprises the steps of:

5   reading said BNF file and classifies data of said BNF file into tokens;

carrying out syntax analysis to each of said
tokens to generate BNF data based on said BNF syntax
rules, and stores said BNF data in a BNF rule
10   database;

generating said syntax analyzing section
program from said BNF data stored in said BNF rule
database;

generating said BNF rule check table program
15   from said BNF data stored in said BNF rule database.

28.   The method according to claim 27 further
comprising the steps of:

carrying out semantic analysis to said BNF
data stored in said BNF rule database; and
5   controlling a display unit to display an
error message when a semantic discrepancy is found in
said BNF data.